CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.10/KRIDL/CEMENT/2014-15

Date: 08.07.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	:	Improvements to roads and drains at AVR Floor Mill Road & surroundings in Ward No.10, BBMP, Bangalore.
REFERENCE	:	EE/BTP/KRIDL/W.O/471/2013-14 Dated: 21.02.2014
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 1989-2013
1	Standard Consistency	IS-4031 (Part -4)	31.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5)	150 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	480 Minutes	Not More than 600 Minutes
3	Soundness by the Le-Chatelier method	IS-4031 (Part 3)	1 mm	Not more than 10 mm

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Job No.: CTCE/BBMP/W.No.10/KRIDL/SAND/2014-15 : 08.07.201

TEST REPORT ON FINE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at AVR Floor Mill Road & surroundings in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/471/2013-14 Dated: 21.02.2014

Date of Testing : 08.07.2014

Material : Sand Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	45	4.50	4.50	95.5	90-100
2.36	192	19.20	23.70	76.3	75-100
1.18	203	20.30	44.00	56.0	55-90
600 Micron	182	18.20	62.20	37.8	35-59
300 Micron	215	21.50	83.70	16.3	8-30
150 Micron	100	10.00	93.70	6.3	0-10

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Ref No: CTCE/BBMP/W.No.10/KRIDL/AGG/2014-15 : 08.07.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at AVR Floor Mill Road & surroundings in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/471/2013-14 Dated: 21.02.2014

Date of Testing : 08.07.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms **10000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	150	1.50	1.50	98.50	95-100
20	5850	58.50	60.00	40.00	30-70
10	2650	26.50	86.50	13.50	10-35
4.75	1185	11.85	98.35	1.65	0-5

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08.08.2014

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to roads and drains at AVR Floor Mill Road & surroundings in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/471/2013-14 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	11.07.2014	08.08.2014	8.135	476.5	21.18
2	11.07.2014	08.08.2014	8.260	490.3	21.79
3	11.07.2014	08.08.2014	8.375	516.3	22.95

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Job No.: CTCE/BBMP/W.No.10/KRIDL/CUBE/2014-15 11.08.2014

TEST REPORT ON CONCRETE CUBES

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvements to roads and drains at AVR Floor Mill Road & surroundings in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/471/2013-14 Dated: 21.02.2014

Sample ID : Road Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	14.07.2014	11.08.2014	8.158	485.5	21.58
2	14.07.2014	11.08.2014	8.253	496.3	22.06
3	14.07.2014	11.08.2014	8.365	518.3	23.04

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TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to roads and drains at AVR Floor Mill Road & surroundings in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/471/2013-14 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	16.07.2014	13.08.2014	8.297	480.3	21.35
2	16.07.2014	13.08.2014	8.356	499.3	22.19
3	16.07.2014	13.08.2014	8.452	515.6	22.92

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TEST REPORT ON CONCRETE CUBES

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Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to roads and drains at AVR Floor Mill Road & surroundings in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/471/2013-14 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	17.07.2014	14.08.2014	8.110	478.3	21.26
2	17.07.2014	14.08.2014	8.290	505.6	22.47
3	17.07.2014	14.08.2014	8.358	518.3	23.04

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Job No.: CTCE/BBMP/W.No.10/KRIDL/CUBE/2014-15 18.08.2014

TEST REPORT ON CONCRETE CUBES

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Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	21.07.2014	18.08.2014	8.255	480.3	21.35
2	21.07.2014	18.08.2014	8.356	496.3	22.06
3	21.07.2014	18.08.2014	8.425	518.3	23.04

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